LOGIC PD®

PRODUCT BRIEF
Logic PD :: Texas Instruments
www.logicpd.com/products

DM3730 / AM3703 Torpedo™ + Wireless SOM

System on Module

WiLink™ 7.0 wireless solution on a single board that is less than one square inch

Combine a powerful applications processor with PC-like speeds and a wireless chipset with 802.11a/b/g/n, Bluetooth 4.0/BLE, and GPS support; toss in Android™ and Linux™ BSPs developed using processes compliant with the ISO 13485 medical system standard; and the outcome is an innovative off-the-shelf solution that reduces your development time and risk.

The award-winning Torpedo + Wireless System on Module (SOM) is an ultra-compact form factor built around the Texas Instruments (TI) DaVinciTM DM3730 processor or SitaraTM AM3703 processor and WiLinkTM 7.0 wireless solution. Confining these two systems to a single board isolates the complex design, manufacturing, and wireless certifications from the rest of your product.

The DM3730/AM3703 Torpedo + Wireless SOM occupies less than one square inch, but boasts PC-like speeds up to 1 GHz with long battery life. Partnered with such high performance is a startlingly low power consumption in suspend state. This balance of speed and power is accomplished through Logic PD's vast system design experience; understanding the most detailed workings of each component and their interaction with one another creates a product that operates at optimal efficiency.

DM3730 / AM3703 Torpedo™ + Wireless SOM

The WL1283 wireless chipset provides access to all the wireless protocols required in today's connected world. 802.11a/b/g/n, Bluetooth, and GPS signals are natively integrated with this SOM and with Logic PD BSPs.

By using the same connectors as Logic PD's existing OMAP35x and DM3730/AM3703 Torpedo SOMs, the DM3730/AM3703 Torpedo + Wireless SOM extends the roadmaps of existing products and provides an upgrade path from today's products to future technologies.

The ultra-compact DM3730/AM3703 Torpedo + Wireless SOM is an ideal off-the-shelf solution for applications in markets where wireless connectivity is required and space is a premium. From point-of-care medical products to handheld communication devices, the DM3730/AM3703 Torpedo + Wireless SOM allows for the powerful versatility and compact designs needed in today's market-changing products.

AWARDS WON IN 2012:

+ CONNECT Most Innovative Product
+ *Design News* Golden Mousetrap Award
+ *Embedded Computing Design* Top Embedded Innovation

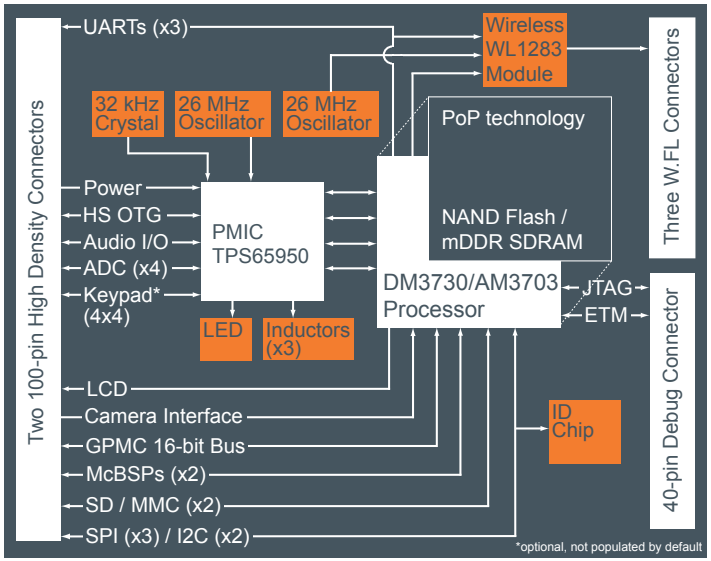
DM3730 / AM3703 TORPEDO + WIRELESS SOM :: HIGHLIGHTS:

+ Product-ready System on Module with a TI DM3730 or AM3703 ARM® Cortex™-A8 processor running up to 1 GHz
+ Android™ & Linux™ Board Support Packages (BSPs)
+ Wireless connectivity: 802.11a/b/g/n, Bluetooth 4.0/BLE, & GPS
+ FCC & IC modular certified
+ Industrial, commercial, & extended temp configurations
+ Ultra-compact form factor (15 x 33 x 3.8 mm installed)
+ Same connectors as DM3730 / AM3703 Torpedo SOM
+ Long product lifecycle

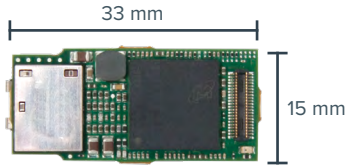
ZOOM™ DM3730 TORPEDO DEVELOPMENT KIT :: FEATURES:

+ Application baseboard
+ DM3730 Torpedo + Wireless SOM DM3730 Torpedo SOM
+ 4.3" WQVGA LCD with 4-wire touchscreen
+ Wattson™ power measurement application
+ Necessary accessories to immediately get up and running

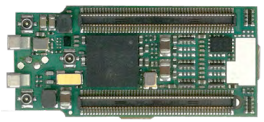
DM3730 / AM3703 Torpedo™ + Wireless SOM Block Diagram



(Block diagram is not drawn to scale; for reference purposes only.)



TOP VIEW :: ACTUAL SIZE



BOTTOM VIEW :: ACTUAL SIZE

DM3730 / AM3703 Torpedo + Wireless SOM Ordering Information

Model Number[1]	Speed (MHz)	SDRAM (MB)	NAND Flash (MB)	Temp. (°C)
SOMAM3703-32-1780AKIR	800	256	512	-40°–85°[2]
SOMDM3730-32-1880AKIR	800	512	512	-40°–85°[2]
SOMDM3730-32-2780AKCR	1000	256	512	0°–70°[3]
SOMDM3730-32-2880AKXR	1000	512	512	-40°–70°[3]

NOTES: 1. Custom configurations are available by special order. Please contact Logic PD Sales for details.
2. Junction temperature of the DM3730/AM3703 processor must stay below 105°C.
3. Junction temperature of the DM3730/AM3703 processor must stay below 90°C.

Zoom™ DM3730 Torpedo Development Kit Ordering Information

Model Number	SOM Configuration	Suggested Resale
SDK-DM3730-30-256512R	SOMDM3730-31-2780AKCR SOMDM3730-20-2780AGCR	$997

LOGIC PD®

6201 Bury Dr. | Eden Prairie, MN 55346
T : 952.941.8071 F : 952.941.8065 | www.logicpd.com

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Product Features

Processor
+TI DaVinci™ DM3730 or Sitara™ AM3703 ARM® Cortex™-A8 core running up to 1 GHz
+TMS320C64x DSP core running up to 800 MHz (DM3730 only)
+POWER SGX™ graphics accelerator (DM3730 only)

Memory
+Mobile DDR / NAND flash (PoP technology) 256 or 512 MB / 512 MB

Wireless Connectivity
+WL1283 wireless module featuring 802.11a/b/g/n, Bluetooth 4.0/BLE, & GPS

Display
+Programmable color LCD controller supports up to 24 bpp TFT interface
+Hardware supports XGA 1024x768 at 24-bit color

Camera
+Parallel camera interface

Audio
+I2S-compliant audio codec (16-bit stereo DAC, 13-bit ADC)

User Interface
+Optional 4x4 keypad interface

PC Card Expansion
+Multiple SD/MMC card support

USB
+One USB 2.0 high-speed On-the-Go interface

Serial I/O
+UARTs, SPI, I2C, McBSPs

GPIO
+Programmable I/O depending on peripheral requirements
+General purpose memory controller (GPMC) interface

Debug
+40-pin debug connector on top side of SOM
+JTAG & ETM support

Software
+Android™ BSP
+Linux™ BSP
+LogicLoader™ (bootloader/monitor)
+Wattson™ power measurement application

Mechanical (Installed)
+15 mm wide x 33 mm long x 3.8 mm high

FCC & IC Modular Certified

RoHS Compliant